

this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

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Amendments

In the Claims:

Please substitute the following claim 7 for the pending claim 7:

D¹

7. (Twice amended) A transgenic non-human animal whose germ and somatic cells comprise the DNA molecule of SEQ ID NO:1 or a DNA molecule which is at least 90% homologous thereto, wherein said DNA molecule is over-expressed in one or more cells of said transgenic animal, and wherein said DNA molecule codes for a protein that has an activity of AD7c-NTP when over-expressed in neuronal cells.

Please substitute the following claim 14 for the pending claim 14:

D²

14. (Once amended) An *in vivo* method for screening a candidate drug that is potentially useful for the treatment or prevention of Alzheimer's disease, neuroectodermal tumors, malignant astrocytomas, and glioblastomas, said method comprising:

- (a) administering a candidate drug to the transgenic animal of claim 7, and
- (b) detecting at least one of the following:
 - (i) the suppression or prevention of expression of the protein coded for by the DNA molecule contained by said animal; or

D²

(ii) the increased degradation of the protein coded for by the DNA construct contained by said animal;
due to the drug candidate compared to a control animal which has not received the candidate drug.

Please substitute the following claim 36 for the pending claim 36:

D³

36. (Once amended) The transgenic non-human animal of claim 7, wherein said activity of AD7c-NTP possessed by said DNA molecule when over-expressed in neuronal cells is selected from the group consisting of neuritic sprouting, nerve cell death, nerve cell degeneration, neurofibrillary tangles and irregular swollen neurites.

Please add the following claims:

~~37.~~ (New) An *in vivo* method for screening a candidate drug that is potentially useful for the treatment or prevention of Alzheimer's disease, neuroectodermal tumors, malignant astrocytomas, and glioblastomas, said method comprising:

D⁴

- (a) administering a candidate drug to the transgenic animal of claim 7, wherein said transgenic animal exhibits at least one of neuritic sprouting, nerve cell death, degenerating neurons, neurofibrillary tangles, or irregular swollen neurites and axons; and
- (b) detecting the reduction of frequency of at least one of neuritic sprouting, nerve cell death, degenerating neurons, neurofibrillary tangles, or irregular swollen neurites and axons in the host due to the drug candidate compared to a control animal which has not received the candidate drug.

38. (New) The method of claim 37, wherein the DNA construct contained by said animal has SEQ ID NO:1.

① 39. (New) The transgenic non-human animal of claim 7, wherein said transgenic animal is a vertebrate.

40. (New) The transgenic non-human animal of claim 7, wherein said transgenic animal is a mammal.
